

1 The opinion in support of the decision being entered today is *not* binding precedent
2 of the Board.

3
4 UNITED STATES PATENT AND TRADEMARK OFFICE

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6
7 BEFORE THE BOARD OF PATENT APPEALS
8 AND INTERFERENCES

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11 *Ex parte* STUART SERKIN and PETER MARYTN

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14 Appeal 2007-1911
15 Application 09/401,873
16 Technology Center 3700

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19 Decided: August 9, 2007

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22 Before STUART S. LEVY, LINDA E. HORNER, and ANTON W. FETTING,
23 *Administrative Patent Judges.*

24 FETTING, *Administrative Patent Judge.*

25 DECISION ON APPEAL

26
27
28 STATEMENT OF CASE

29 Stuart Serkin and Peter Marytn (Appellants) seek review under 35 U.S.C.
30 § 134 of a Final rejection of claims 1, 2, 4, 5, and 7-29, the only claims pending in
31 the application on appeal.

32 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6.

33 We REVERSE and MAKE A NEW GROUND OF REJECTION UNDER
34 37 C.F.R. § 41.50(b).

1 The Appellants invented an electronic market order and quote collector that
2 couples order delivery systems to its order collector facility and manages quotes
3 received from the order delivery systems. The quote manager manages multiple
4 quotes/orders at multiple price levels. The facility's montage manager displays
5 quotes in an aggregate montage or a current quote montage depending on
6 parameters specified in the multiple quotes. The order collector facility transmits
7 multiple orders or quotes at multiple price levels from market participants and
8 provides a unified point of entry of orders into the market system to access
9 quotes/orders displayed (as either attributable or non-attributable). The order
10 collector facility also provides a single point of delivery to quoting market
11 participants of liability orders purportedly eliminates potential for dual liability.

12 An understanding of the invention can be derived from a reading of exemplary
13 claim 1, which is reproduced below [bracketed matter and some paragraphing
14 added].

15 1. A collector facility for an electronic market comprises:

16 [1] a common interface to provide a single, common point of entry for
17 coupling order delivery systems and quote entry systems that send
18 quotes to the collector facility;

19 [2] a manager process that manages quotes received from the quote
20 entry systems and orders received from the order delivery systems;
21 and

22 [3] an order routing/execution manager to provide for all orders
23 received by the common interface either a single point delivery of
24 executions or routing of orders in accordance with parameters of the
25 order.

1 This appeal arises from the Examiner's Final Rejection, mailed October 27,
2 2003. The Appellants filed an Appeal Brief in support of the appeal on May 21,
3 2004, and the Examiner's Answer to the Appeal Brief was mailed on July 13,
4 2004. A Reply Brief was filed on September 15, 2004. The Appellants presented
5 their arguments at an oral hearing on July 12, 2007.

6
7 PRIOR ART

8 The Examiner relies upon the following prior art:

9 Korhammer US 6,278,982 B1 Aug. 21, 2001

10 Rai US 6,377,982 B1 Aug. 23, 2002

11 Jeffrey W. Smith, James P. Selway III, and D. Timothy McCormick, *The Nasdaq*
12 *Stock Market: Historical Background and Current Operation*, NASD Working
13 Paper 98-01, Department of Economic Research, NASD, 1998 (Smith)

14 In addition, in this opinion we discuss the following prior art located by the
15 Board:

16 NASD Rulemaking: Relating to an Integrated Order Delivery and Execution
17 System, *Self-Regulatory Organizations; Notice of Filing of Amendment No. 1 to a*
18 *Proposed Rule Change by National Association of Securities Dealers, Inc.*
19 *Relating to an Integrated Order Delivery and Execution System*, SECURITIES
20 AND EXCHANGE COMMISSION, Release No. 34-39718, File No. SR-NASD-
21 98-17, March 4, 1998 (Also published as 63 F.R. 12124, (March 12, 1998))
22 (NASD)

23
24 REJECTIONS

25 Claims 1, 2, 4, 5, 14-17, 20-22, 26, and 27 stand rejected under 35 U.S.C.
26 § 103(a) as unpatentable over Korhammer and Rai.

27 Claims 7-13, 18, 19, 23-25, 28, and 29 stand rejected under 35 U.S.C. § 103(a)

as unpatentable over Korhammer, Rai, and Smith.

ISSUES

- Whether the Appellants have sustained their burden of showing that the Examiner erred in rejecting claims 1, 2, 4, 5, 14-17, 20-22, 26, and 27 under 35 U.S.C. § 103(a) as unpatentable over Korhammer and Rai.
- Whether the Appellants have sustained their burden of showing that the Examiner erred in rejecting claims 7-13, 18, 19, 23-25, 28, and 29 under 35 U.S.C. § 103(a) as unpatentable over Korhammer, Rai, and Smith.

The pertinent issue turns on whether the combination of Korhammer and Rai suggests a single, common point of entry for coupling order delivery systems and quote entry systems that send quotes to the order collector facility.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Claim Construction

01. In a preferred embodiment of the Appellants' order collector facility, the SelectNet system is used as a negotiation system (Specification 11:12-14). Thus, SelectNet is an embodiment of a negotiation system.

02. SelectNet is also an embodiment of an order execution system (Specification 3:14-18).

03. SOES (Small Order Execution System) is an embodiment of an order

1 delivery system (Specification 3:14-18).

2 *Korhammer*

3 04. Korhammer is directed toward a securities trading consolidation
4 system. In this system, each customer uses a single application on a
5 single trader terminal to view and analyze security market information
6 from, and to conduct security transactions with, two or more electronic
7 communication networks (ECNs), or other comparable alternative
8 trading systems (ATs). A consolidating computer system (CCS)
9 supplies the market information and processes the transactions in the
10 present system. (Korhammer, col. 4, ll. 12-21.)

11 05. Korhammer's trading terminals, participating ECN order book
12 computers, participating electronic exchanges, and its CCS form a
13 computer network. The CCS aggregates order book information from
14 each participating ECN order book. This information includes security,
15 order identification, and bid/offer price information. (Korhammer, col. 4,
16 ll. 22-30.)

17 06. The combined information, including bid and ask prices for
18 participating electronic exchanges, is displayed to customers for a
19 selected security separately for bids and offers, and sorted by price,
20 volume and other available attributes as desired. (Korhammer, col. 4, ll.
21 32-35.)

22 07. Once information from a number of ECNs and electronic exchanges
23 are combined in the CCS, either the CCS, the trading terminal, or both
24 can be used to calculate real time metrics. The real time metrics, such as
25 volume trends, price trends, and various on demand calculations, can aid

1 the trader in making decisions. The CCS can also determine the
2 occurrence of market events in which its customers may be interested,
3 such as a new high bid for the day or a locked market where the best bid
4 is equal to the best offer. (Korhammer, col. 4, ll. 45-54.)

5 08. The trading terminal both displays the market information provided to
6 it by the CCS and allows the customer to place bid and/or offer orders
7 and route them through the CCS to any permissible ECN or electronic
8 exchange. The trading terminal can also execute buy or sell transactions
9 against listed bids and offers, and by using the CCS place the order using
10 the correct protocol for the relevant ECN or electronic exchange.
11 (Korhammer, col. 4, ll. 55-64.)

12 09. Korhammer states that its ECN is a closed network that does not
13 interact with other ECNs or NASDAQ. Its order book server interacts
14 with each of its trading terminals to exchange orders, executions and
15 confirmations, and based on this information, supply market data to each
16 of its trading terminals. In other words, each of its trading terminals
17 supplies its orders to the ECN order book server, which aggregates this
18 information to construct the ECN's order book, which is in turn,
19 supplied to each of its trading terminals. (Korhammer, col. 5, l. 58 - col.
20 6, l. 02.)

21 10. FIG. 5 of Korhammer shows pricing data that would be available to
22 its customer. "Here, space 251 has been checked on screen 280 and ECN
23 information integrated into the display. Screen 280 shows not only
24 NASDAQ Level II data but also the full order book for the following
25 three ECNs: Instinet, Island and Strike. For these ECN's [*sic*], there are

multiple bids and offers available for DELL, as opposed to just the best bid and offer. For example, Island has outstanding five bids 281-285 in addition to its high bid 207, and three offers 286-288 in addition to its low offer 274, all at varying prices and quantities. Screen 280, thus, offers access to a greater amount of pricing information (thus greater liquidity), consolidated in one display. Thus, the entire order books of all ECN members and the market makers' bids and offers are consolidated into a single informative screen for any particular security. This additionally provides the customer with the ability to take advantage of price variations in a rapidly changing environment.” (Korhammer, col. 9, ll. 8-25.)

Rai

11. Rai is directed towards remote wireless access to the public internet, private intranets and internet service providers. It provides a wireless packet switched data network for end users that divides mobility management into local, micro, macro and global connection handover categories and minimizes handoff updates according to the handover category. According to one embodiment, a coupled data network with an accounting system includes a foreign network and a home network. The home network includes a home mobile switching center with a home inter-working function,. The home inter-working function includes a home accounting collection module that collects accounting data on message traffic transported between the end system and a communications server through the home inter-working function and through the serving inter-working function. (Rai, col. 2, l. 30 – col. 3, l.

1 5.)

2 12. Rai states that, “a single access point ... may provide multi-channel
3 capability. Thus, a single access point ... may act on traffic from
4 multiple end systems, and what is described herein as separate access
5 points ... contemplates equivalence with a single multi-channel access
6 point.” (Rai, col. 47-48, ll. 61-01.)

7 *Smith*

8 13. Smith is a descriptive text of how the NASDAQ market is
9 implemented.

10 PRINCIPLES OF LAW

11 *Claim Construction*

12 During examination of a patent application, pending claims are given
13 their broadest reasonable construction consistent with the specification. *In*
14 *re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969);
15 *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827,
16 1834 (Fed. Cir. 2004).

17 Although a patent applicant is entitled to be his or her own lexicographer of
18 patent claim terms, in *ex parte* prosecution it must be within limits. *In re Corr*,
19 347 F.2d 578, 580, 146 USPQ 69, 70 (CCPA 1965). The applicant must do so by
20 placing such definitions in the Specification with sufficient clarity to provide a
21 person of ordinary skill in the art with clear and precise notice of the meaning that
22 is to be construed. *See also In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ 2d 1671,
23 1674 (Fed. Cir. 1994) (although an inventor is free to define the specific terms
24 used to describe the invention, this must be done with reasonable clarity,

1 deliberateness, and precision; where an inventor chooses to give terms uncommon
2 meanings, the inventor must set out any uncommon definition in some manner
3 within the patent disclosure so as to give one of ordinary skill in the art notice of
4 the change).

5 *Obviousness*

6 A claimed invention is unpatentable if the differences between it and the
7 prior art are “such that the subject matter as a whole would have been obvious at
8 the time the invention was made to a person having ordinary skill in the art.” 35
9 U.S.C. § 103(a) (2000); *KSR Int’l v. Teleflex Inc.*, 127 S.Ct. 1727, 82 USPQ2d
10 1385 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14, 148 USPQ 459, 465
11 (1966).

12 In *Graham*, the Court held that that the obviousness analysis is bottomed on
13 several basic factual inquiries: “[(1)] the scope and content of the prior art are to be
14 determined; [(2)] differences between the prior art and the claims at issue are to be
15 ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved.” 383
16 U.S. at 17, 148 USPQ at 467. *See also KSR Int’l v. Teleflex Inc.*, 127 S.Ct. at 1734
17 82 USPQ2d at 1391. “The combination of familiar elements according to known
18 methods is likely to be obvious when it does no more than yield predictable
19 results.” *KSR*, at 1739, 82 USPQ2d at 1396.

20 “When a work is available in one field of endeavor, design incentives and
21 other market forces can prompt variations of it, either in the same field or in a
22 different one. If a person of ordinary skill in the art can implement a predictable
23 variation, § 103 likely bars its patentability.” *Id.* at 1740, 82 USPQ2d at 1396.

24 “For the same reason, if a technique has been used to improve one device,
25 and a person of ordinary skill in the art would recognize that it would improve

1 similar devices in the same way, using the technique is obvious unless its actual
2 application is beyond his or her skill.” *Id.*

3 “Under the correct analysis, any need or problem known in the field of
4 endeavor at the time of invention and addressed by the patent can provide a reason
5 for combining the elements in the manner claimed.” *Id.* at 1742, 82 USPQ2d at
6 1397.

7
8 ANALYSIS

9 *Claims 1, 2, 4, 5, 14-17, 20-22, 26, and 27 rejected under 35 U.S.C. § 103(a) as*
10 *unpatentable over Korhammer and Rai.*

11 We address independent claims 1, 14, 20 and 21, whose issues are
12 determinative.

13 *Independent Claim 1*

14 The Examiner found that Korhammer discloses a collector facility for an
15 electronic market comprising an interface for coupling order delivery systems to
16 the order collector facility and a quote manager that manages quotes received at
17 multiple price levels and a montage manager that displays an aggregate montage or
18 a current quote montage at multiple price levels. The interface couples the
19 SelectNet negotiation system and execution systems (Final Rejection¹ 2:2 First ¶).

20 The Examiner further found that Korhammer does not disclose a common
21 interface to provide a single, common point of entry for coupling systems. To

¹ The Examiner did not recite the basis for the rejections in the Examiner Answer, but instead referred the reader back to the Final Rejection (Answer 3:10).

1 overcome this deficiency, the Examiner found that Rai teaches the step of
2 replacing a multiple entry points with a single, common entry point for multiple
3 systems. The Examiner concluded that it would have been obvious to one of
4 ordinary skill to employ the teachings of Rai with the invention of Korhammer to
5 provide a single, common point of entry to streamline the system (Final Rejection
6 2:2 Second ¶).

7 The Appellants contend that the Examiner concedes that neither Korhammer
8 nor Rai teach the feature of an order routing/execution manager to provide for all
9 orders received by the common interface either a single point delivery of
10 executions or routing of orders in accordance with parameters of the order (Br. 8:
11 Last ¶).

12 The Appellants further contend that Rai is directed to network accounting,
13 which concerns examining attributes of packets sent over a network, and that the
14 examiner has failed to show why one would look to the teachings of Rai to provide
15 a collector facility having a single point of delivery of executions, as claimed (Br.
16 9:Second ¶).

17 Thus, the Appellants contend that a person of ordinary skill in the art would not
18 combine Korhammer with Rai. The Appellants further contend that one would
19 also not be motivated since neither Korhammer nor Rai are faced with the problem
20 solved by Appellant. Appellant sets forth the problem of dual liability and the
21 general reluctance of ECNs participating in order execution systems. While,
22 Korhammer is directed to the problem of providing a consolidated ECN order
23 book, Korhammer does not have its own execution system instead relying on
24 matching networks of the ECNs to fill orders. Thus, Korhammer merely is a
25 collector of orders without an execution facility. The issue of dual liability is not

1 recognized nor does it arise in Korhammer, because Korhammer provides less than
2 that shown and claimed by Appellant. Rai on the other hand is completely
3 irrelevant to the problem of dual liability or financial markets in general (Br.
4 9:Third ¶).

5 We find that Rai, being directed towards remote wireless access to the public
6 internet, private intranets and internet service providers (FF 11), is indeed
7 irrelevant to financial markets in general, and in particular that Rai does not
8 suggest a single point of delivery of executions. Thus, the Appellants have
9 sustained their burden of showing that the Examiner erred in rejecting claim 1, and
10 claims 2, 4, and 5 that depend from claim 1.

11 *Independent Claims 20 and 21*

12 The Appellants advanced similar arguments as to independent claim 20 and 21
13 (Br. 13: Last ¶; Br. 14: First full ¶ under Group VIII). Therefore we find that the
14 Appellants have sustained their burden of showing that the Examiner erred in
15 rejecting claims 20 and 21, and claims 22, 26, and 27 that depend from claims 20
16 and 21.

17 *Independent Claim 14*

18 Independent Claim 14 is for a collector facility for an electronic market having
19 “an interface for coupling order delivery systems to the collector facility; a quote
20 manager that manages quotes/orders received from the interface at multiple price
21 levels; and a montage manager to *display quotes received from the quote order*
22 *manager in an aggregate montage and an attributable quote montage if the quotes*
23 *are attributable consistent with parameters specified in the quotes.”* (emphasis not
24 in original.)

1 The Examiner did not provide findings as to claim 14 separate from those
2 regarding claim 1. (Final Rejection 2:2 First and Second ¶).

3 The Appellants contend that Korhammer does not suggest an order type in
4 which the order is displayed but not attributed (Br. 12). The Examiner did not
5 address this feature of Appellant's invention and failed to show where in
6 Korhammer attributable and non-attributable order types were mentioned.

7 The Examiner responded that claim 14 employs conditional language in the
8 limitation of "an attributable quote montage if the quotes are attributable consistent
9 with parameters specified in the quotes." (Answer 5.) The Examiner thus found
10 that claim 14 does not affirmatively claim an order type in which the order is
11 displayed but not attributed, and Appellants' argument is therefore moot.

12 While the use of the phrase beginning with the word "if" denotes a conditional
13 phrase, it is simply untrue that a conditional phrase is not a positive recitation. A
14 conditional phrase in the form of programming logic, as in claim 14, positively
15 recites the condition declared by the *if* phrase.

16 The issue is that, absent a positive recitation of performing a test for that
17 condition, the claim is ambiguous as to whether the step in the if phrase must be
18 executed. The if phrase criteria, however, in claim 14 is limited to whether quotes
19 are attributable, and therefore, the step contingent upon that criteria is the display
20 of the attributable montage. Korhammer is silent as to an aggregate montage.

21 Thus, the Appellants' argument is not moot, and as the Appellants contend, the
22 Examiner has failed to show that Korhammer suggests a display of an aggregate
23 montage. Thus, the Appellants have sustained their burden of showing that the
24 Examiner erred in rejecting claim 14, and claims 15-17 that depend from claim 1.

1 Accordingly we do not sustain the Examiner's rejection of claims 1, 2, 4, 5, 14-
2 17, 20-22, 26, and 27 under 35 U.S.C. § 103(a) as unpatentable over Korhammer
3 and Rai.

4
5 *Claims 7-13, 18, 19, 23-25, 28, and 29 rejected under 35 U.S.C. § 103(a) as*
6 *unpatentable over Korhammer, Rai, and Smith.*

7 Smith presents implementation details of the NASDAQ market (FF 13), and
8 fails to make up for the deficiencies in Korhammer and Rai. Thus, the Appellants
9 have sustained their burden of showing the Examiner erred in rejecting these
10 claims for the same reasons, *supra*, as in the rejections of their base claims 1, 14,
11 20, and 21.

12 Accordingly we do not sustain the Examiner's rejection of claims 7-13, 18, 19,
13 23-25, 28, and 29 under 35 U.S.C. § 103(a) as unpatentable over Korhammer, Rai,
14 and Smith.

15
16 NEW GROUND OF REJECTION

17 We enter the following new ground of rejection under 37 C.F.R. § 41.50(b).

18 Claims 1, 2, 4, 5, and 7-29 are rejected under 35 U.S.C. § 103(a) as
19 unpatentable over Korhammer, NASD, and Smith.

20
21 ADDITIONAL FACTS PERTINENT TO THE ISSUES

22 The following additional enumerated Findings of Fact (FF) are believed to be
23 supported by a preponderance of the evidence.

1 *NASD*

2 14. “Nasdaq is proposing a new integrated order delivery and execution
3 system (‘System’). The System responds to the demands of investors and
4 NASD members for a marketplace that provides for fast and efficient
5 access to the best prices in the market and effective integration of price
6 discovery, execution, and trade reporting. When combined with a
7 broadly accessible voluntary limit order file featuring order anonymity
8 and full display of limit order interest, Nasdaq's new System will further
9 enhance the satisfaction of a wide range of market participant needs.”
10 (NASD 2:A. General, First ¶.)

11 15. “The new System will replace completely the existing SOES and
12 SelectNet systems. The functionality previously contained in these two
13 separate systems will be integrated into a single system, which should
14 alleviate many of the concerns market makers have had with exposure to
15 multiple points of simultaneous execution liabilities. The new System
16 will permit all registered participants to send orders to access either the
17 best market maker quote or ECN order, or orders visible in the Nasdaq
18 Limit Order File, and to obtain immediate or rapid executions of such
19 orders.” (NASD 8:D.1. Overview and Scope, First ¶.)

20 16. “As occurs in today's environment, the new System will have three
21 types of registered executing participants: market makers, ECNs and
22 UTP exchange specialists. Quotations provided by these three entities
23 will be displayed on Nasdaq Workstations and disseminated through
24 information vendors. Registered NASD members, and certain customers
25 that are sponsored by NASD members, will be able to deliver orders of

1 varying size through the new System to electronically access the
2 displayed quotations. Market maker and ECN display obligations will be
3 the same as today. As provided for in the proposed rules, market makers
4 must maintain two-sided quotations and be firm up to the displayed size
5 of such quotations. The System will provide for market makers an
6 automated quotation update facility similar to that which is provided
7 today.” (NASD 8-9: D.1. Overview and Scope, Second ¶.)

8 17. “The proposed rules permit any NASD member to enter proprietary
9 orders into the System for immediate execution, order delivery, or
10 display in the Limit Order File. The NASD believes that any NASD
11 member, whether it is an order entry firm or a market maker in a
12 particular stock, should be permitted to enter proprietary orders. The
13 rationale for permitting a broad use of proprietary orders is that entry of
14 such orders may provide additional liquidity to the market and that any
15 member is currently able to enter such orders through an ECN. It would
16 be illogical to limit the use of Nasdaq's Limit Order File when the same
17 activity is already permissible through other vehicles.” (NASD
18 10:D.2.b. Proprietary Orders.)

19 18. “Nasdaq will display limit orders [note that limit orders are quotes]
20 entered into the Limit Order File in three separate ways. First, Nasdaq
21 will display the Top of File, i.e. , the best limit order to buy and the best
22 limit order to sell, in the Nasdaq quote montage, where it will be ranked
23 in price/time sequence with all other quotes and orders entered into
24 Nasdaq, and which will be used to calculate the inside quote. Nasdaq
25 will also display the Top of File in a separate window on the Nasdaq

1 Workstation. Both of these displays will be dynamically updated, i.e.,
2 the System will automatically change the prices as orders enter and
3 execute. Finally, Nasdaq will maintain for all Nasdaq Workstation
4 subscribers and vendors a Full File display that will be available on a
5 query/response basis. In other words, the user must enter a key stroke to
6 obtain information regarding all of the orders displayed in the Full File.
7 To obtain new information about the status of orders in the Full File, the
8 subscriber must re-inquire of the System. At the first stage of
9 implementation, Nasdaq, for capacity reasons, will not dynamically
10 update the Full File. All orders displayed in the Limit Order File will be
11 displayed anonymously, i.e., the System will not attach the MMID of the
12 member entering the order to that order for display purposes.” (NASD
13 15-16:D.5. Limit Order Display.)

14 19. “As proposed in this filing, Nasdaq will display all orders in the File
15 on an anonymous basis. Upon execution of any such order, either when
16 another limit order matches it, or when it interacts with a Nasdaq
17 displayed quote, the System will provide to all parties involved in the
18 execution an execution report that identifies the contra-party to the trade.
19 For example, when MMA enters a limit order into the File at 20 bid, it is
20 displayed without an identifier indicating that MMA entered the order.
21 Subsequently, MMB enters a limit order to sell at 20. Because the two
22 limit orders match, they will execute against each other. When the
23 execution occurs, MMA will receive a report from the system
24 identifying MMB as the contra-party and MMB will receive a report
25 indicating that MMA was its contra-party.” (NASD 16:D.6. Anonymity

of Executions in the File.)

20. “The integrated nature of the System will address issues related to unintended "double liability" that can be incurred by market makers, thus reducing a disincentive for market maker participation, and, along with the Firm Quote Compliance Facility, should significantly ease the associated regulatory and compliance burdens involving the Firm Quote Rule and related NASD rules.” (NASD 20:E. Statutory Basis, Second ¶.)

ANALYSIS

Independent claim 1

NASD discloses a common interface to provide a single, common point of entry for coupling order delivery systems and quote entry systems that send quotes to the collector facility; a manager process that manages quotes received from the quote entry systems and orders received from the order delivery systems; and an order routing/execution manager to provide for all orders received by the common interface either a single point delivery of executions or routing of orders in accordance with parameters of the order (FF 14&15). Korhammer shows an exemplary system that would incorporate NASD’s terminals in NASD’s proposed environment (FF 04-08). Since the functionality previously contained in the two separate SOES and SelectNet systems will be integrated into a single system, there must be some parameter associated with orders to direct processing along the appropriate functionality stream. This solves the double liability problem argued by the Appellants (Br. 9-10:Last ¶- Top of page) (FF 20).

Dependent claims 2, 4, 5, and 7-13

Claims 2 and 13 - Coupling execution and negotiation comes from the combined SOES and SelectNet functionalities (FF 01-03 and 15).

Claim 4 – Managing multiple quotes and orders at multiple price levels is shown by the management of the limit order file in NASD, since a limit order file contains multiple quotes and orders at multiple price levels (FF 18).

Claim 5 – Aggregate or current quote montage is shown by the three methods of display in NASD, including montage and full displays (FF 18). Korhammer shows a full display (FF 10). Display is consistent with parameters in the quotes such as the security and price.

Claims 7-12 recite implementation details of the NASD operations as taught by Smith, prior to the date of the invention, and their applicability to these claims is not contended by the Appellants. Such implementation details show the operations inherent in Korhammer's system as applied toward NASD transactions.

Independent claim 14

Claim 14's collector facility for an electronic market having "[1] an interface for coupling order delivery systems to the collector facility; [2] a quote manager that manages quotes/orders received from the interface at multiple price levels; and [3] a montage manager to [3(a)] display quotes received from the quote order manager in [3(a)(i)] an aggregate montage and [3(a)(ii)] an attributable quote montage [3(b)] if the quotes are attributable consistent with parameters specified in the quotes" is shown by Korhammer and NASD as outlined for claim 1, *supra*, regarding the interface, and as outlined for claim 5, *supra*, regarding the aggregate and full montage display. The newly added limitation regards display of

1 attributable orders.

2 We initially find that element [3(b)] is ambiguous in its effect on the scope of
3 the claim, particularly element [3(a)(ii)]. This structural element [3(a)(ii)] recites
4 the capacity to perform a display step. The performance of [3(a)(ii)] is contingent
5 upon whether [3(b)] is true.

6 If the condition for performing a contingent step in a method claim is not
7 satisfied, the performance recited by the step need not be carried out in order for
8 the claimed method to be performed. Similarly, in an apparatus claim that recites
9 structure to perform steps, absent an element that tests for the contingent condition,
10 if the condition for performing a contingent step claim would not be satisfied in
11 operation, the structure that performs the recited step need not be present in order
12 for the claimed structure to be met.

13 Therefore, it is ambiguous as to whether elements [3(a)(ii)] and [3(b)] limit the
14 scope of the claim. Accordingly, we analyze the patentability of claim 14 under
15 both constructions of limiting and not so limiting.

16 If elements [3(a)(ii)] and [3(b)] do not limit the scope of the claim, then claim
17 14 is simply a subset of the subject matter of claims 1 and 5, whose limitations we
18 found, *supra*. If they do limit the scope, then, in addition, we find the following.

19 We find that Korhammer displays an attributable montage (FF 10) whereas
20 NASD proposes to display anonymous, i.e. non-attributable, montages (FF 19).
21 Thus, one of ordinary skill would have seen examples of both attributed and non-
22 attributed quotes in the art at the time of the invention and would have envisaged
23 combining the display of both aggregate and attributable full montages, based on
24 the disclosed practice of each alternative. Essentially, the aggregate montage is a
25 summary version of the full montage and combined displays of summary and

1 detail levels of data are notoriously old in all areas of finance and accounting.
2 Thus, it would have been obvious to a person of ordinary skill in the art to have
3 combined the displays to provide detail and summary reporting.

4 Parameters associated with an order are provided as a matter of normal
5 operation and would therefore have been the most readily apparent vehicle for
6 signaling the selection whether to show quotes as attributable. Thus, it would have
7 been obvious to a person of ordinary skill in the art to have displayed quotes in an
8 aggregate montage and an attributable quote montage if the quotes are attributable
9 consistent with parameters specified in the quotes.

10 *Dependent Claims 15-19 and 25*

11 Dependent claims 15-19 and 25 combine the subject matter of claim 14 with
12 various combinations of claims 2, 4, 5, and 7-13 and the analysis for their rejection
13 follows that of those claims accordingly.

14 *Independent Claims 20 and 21*

15 Claims 20 and 21 are for a method and a program product that each contains
16 substantially similar limitations to the other. Their subject matter of [1] interfacing
17 a plurality of disparate order delivery systems to an order collector facility that
18 provides a central point of access to the disparate order delivery systems;
19 [2] receiving multiple quotes/orders received from the interface at multiple price
20 levels; [3] displaying in an aggregate montage indicators of an aggregate of the
21 quotes received; and [4] displaying those of the received quotes that represent
22 attributable interest in a quote montage consistent with attribution parameters
23 specified in the multiple quotes is shown by Korhammer and NASD as outlined for
24 claim 1, *supra*, regarding the interface; and as outlined for claim 5, *supra*,
25 regarding the aggregate and full montage display; and as outlined for claim 4,

1 *supra*, regarding multiple quotes and orders and multiple price levels; and as
2 outlined for claim 14, *supra*, regarding display of attributable quotes. The analysis
3 of the rejection for claims 20 and 21 follows that of those claims accordingly.

4 *Dependent Claims 22-24 and 26-29*

5 Dependent claims 22, 24, 26, 28 and 29 combine the subject matter of claim 20
6 with claims 4, 7 and 8 and the analysis for their rejection follows that of those
7 claims accordingly. Claims 23 and 27 recites the operation of routing orders
8 according to their nature, as generally taught by Korhammer (FF 08).

9
10 CONCLUSIONS OF LAW

11 The Appellant has sustained its burden of showing that the Examiner erred in
12 rejecting claims 1, 2, 4, 5, and 7-29 under 35 U.S.C. § 103(a) as unpatentable over
13 the Examiner's applied art.

14 A new ground of rejection has been introduced rejecting claims 1, 2, 4, 5, and
15 7-29 under 35 U.S.C. § 103(a) as unpatentable over Korhammer, NASD, and
16 Smith.

17 On this record, the Appellants are not entitled to a patent containing claims 1,
18 2, 4, 5, and 7-29.

DECISION

To summarize, our decision is as follows:

- The rejection of claims 1, 2, 4, 5, 14-17, 20-22, 26, and 27 under 35 U.S.C. § 103(a) as unpatentable over Korhammer and Rai is not sustained.
- The rejection of claims 7-13, 18, 19, 23-25, 28, and 29 under 35 U.S.C. § 103(a) as unpatentable over Korhammer, Rai, and Smith is not sustained.
- A new ground of rejection of claims 1, 2, 4, 5, and 7-29 under 35 U.S.C. § 103(a) as unpatentable over Korhammer, NASD, and Smith is entered under 37 C.F.R. § 41.50(b).

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b). 37 CFR § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 CFR § 41.50 (b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner

(2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record

1
2 No time period for taking any subsequent action in connection with this appeal
3 may be extended under 37 CFR § 1.136(a)(1)(iv).

4 REVERSED
5 41.50(b)
6

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11 JRG

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